

**Work Order ID 68485**

Thursday, April 14, 2011 10:03:01 AM



Page 1

Item ID: D3315-3

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 4/14/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/21/2011 Req'd Qty: 4.00



Customer: .....

**Reference:**

Approvals:

Process Plan:

Date: 110411

Tooling:

Date: .....

Run Start



QC:

Date: .....

SPC (Y/N):

Date: .....

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3315	Rev B

100



FLOW WATER JET

Waterjet

FLOW CNC Waterjet  
060 . 063

Memo

0.00

FB 11-5-3

4/11-4-18

110



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Quality Control

Memo

~0.00

FB 11-5-3

FB 11-4-18

120



QC8- Inspect parts - second check

0.00

QC

Quality Control

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 68485**

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Start Date: 4/14/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/21/2011 Req'd Qty: 4.00



Customer:

**Reference:**

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**Sequence ID/  
Work Center ID**

130

**Operation  
Description****Set Up/  
Run Hours**

Tool ID

Tool #

**Plan  
Code****Accept  
Qty****Reject  
Qty****Reject  
Number****Insp.  
Stamp**

0.00

88

1105103

4

Brake NC

NC BRAKE

Brake NC

Memo

0.00

88 1105103

Form using DT8179 Die and DT8157 as per Dwg D3315Rev: B

140



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

88 1105103

Memo

0.00

X4

150



Large Fab

Large Fab

0.00

Memo

0.00

EZ 11-6-00

64

Large Fab

Weld hard surface using D3315-3T3 as per QSI 004 and Dwg D3315 Rev:  
B  Qty Part Number Description Batch A/R  
N/A 7560 Hardcoat Rod M117139

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 68485**

Thursday, April 14, 2011 10:03:02 AM



Page 3

Item ID: D3315-3

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 4/14/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/21/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

8 u66/21

170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

8 u64/71

74

180



Powdercoat

Powder Coating

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

0.00

OVEN TEMPERATURE:

Memo

3:30

START TIME:

□FINISH TIME:

4:00

325°F

4x Ø M 11/06/21

M 11 5/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 68485**

Page 4

Thursday, April 14, 2011 10:03:02 AM

Item ID: D3315-3

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Item Name: Wearplate

Stop



Start Date: 4/14/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/21/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Quality Control

200

Packaging

0.00



Packaging

Packaging

Memo

0.00

Identify on inside surface using a permanent fine point marker with the following:  
 TCCA-PDA, Dart Aerospace Ltd.  P/N: D3315-3, B/N: BXXXXXX  For Product Eligibility see PDA04-17  and Stock  Location: ST 496

210

QC21- Final Inspection - Work Order Release

0.00



QC

Quality Control

Memo

0.00

WT

11-06-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Thursday, April 14, 2011 10:03:08 AM

Page 1

Work Order ID: 68485



Parent Item: D3315-3



Parent Item Name: Wearplate

Start Date: 4/14/2011

Required Date: 4/21/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP: A 05.05.12 New issue KJ/JLM  
IPP Rev:B As per Rev B 06-03-24 JLM  
IPP Rev:C Now on Waterjet 07-07-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M1010S16GA Purchased No 100 sf 38.0000 2.296 9.667368



1010/1025 sheet 16GA

Location	Loc Qty	Loc Code
MAT019	38	
116791	38	
117500		
		116791

B11-4-18

B11-5-3

117500

116791

(4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	68985
Description: Wearplate		Part Number:	D3315-3
Inspection Dwg: D3315 Rev: B		Page 1 of 1	

### FIRST ARTICLE INSPECTION CHECKLIST

First Article  Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
62.75	+/-0.030	60.75	x		T	IB01
58.094	+/-0.010	58.094	x		T	
51.368	+/-0.010	51.368	x		T	
44.531	+/-0.010	44.531	x		T	
37.719	+/-0.010	37.714	x		T	
30.375	+/-0.010	30.375	x		T	
24.188	+/-0.010	24.188	x		T	
18.875	+/-0.010	18.875	x		T	
17.375	+/-0.010	17.375	x		T	
10.594	+/-0.010	10.594	x		T	
5.375	+/-0.010	5.375	x		V	IB02
0.875	+/-0.010	.881	x		V	
1.62	+/-0.030	1.623	x		V	
5.214	+/-0.010	5.210	x		V	
4.402	+/-0.010	4.409	x		V	
3.550	+/-0.010	3.555	x		V	
Ø0.300	+0.006/-0.001	.302	x		V	
Ø0.266 x 0.450	+/-0.010	Ø0.26456	x		V	

Measured by:	R	Audited by:	S	Prototype Approval:	N/A
Date:	11-5-13	Date:	11/05/13	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.01.22	New Issue	KJ/EC/DD	JK

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY

RECORDED TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

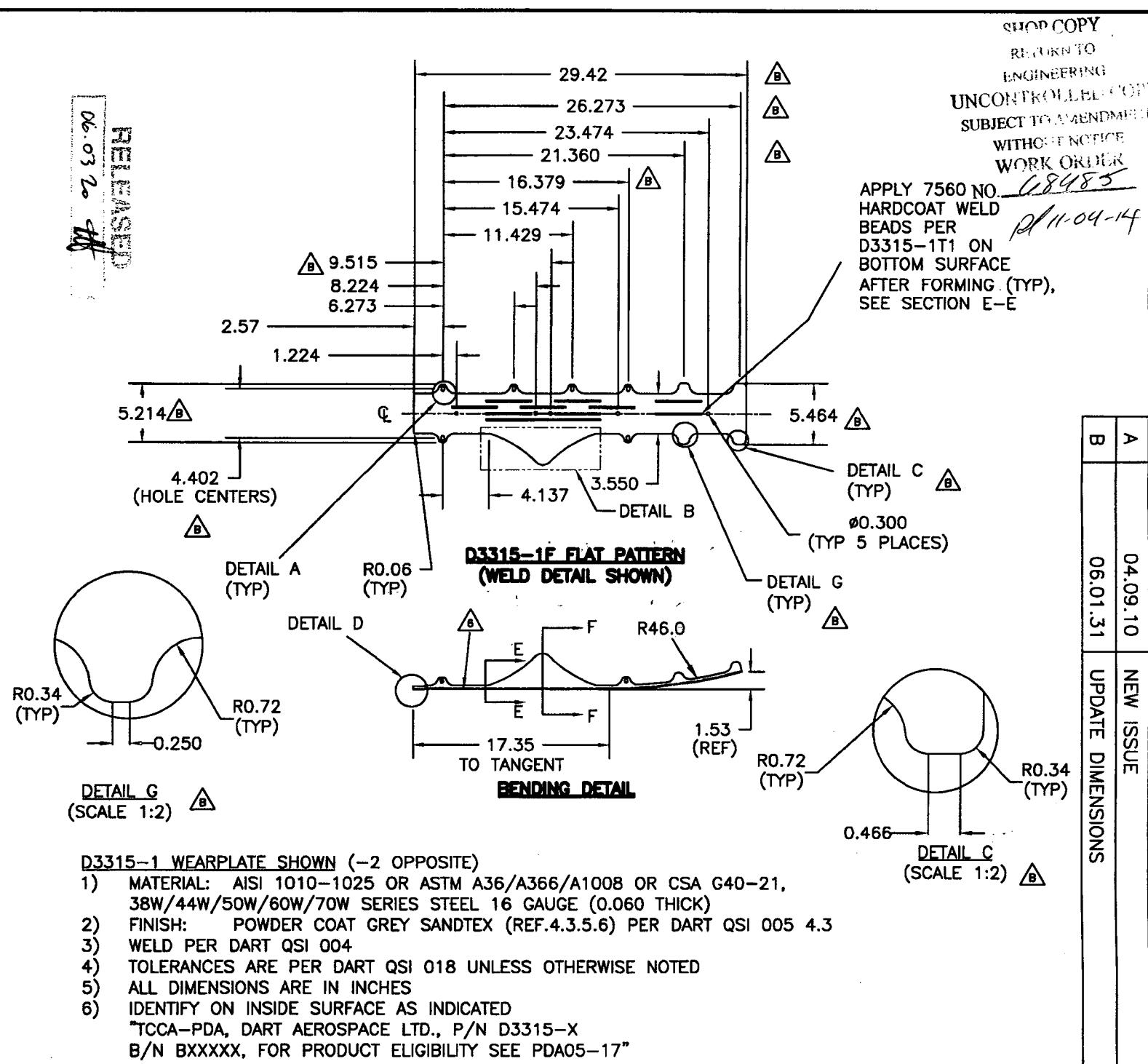
WITHOUT NOTICE

WORK ORDER

08985

PL 11-04-14

**DART**



DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE		DRAWING NO.
A	PH	D3315
B	PH	NEW ISSUE
		UPDATE DIMENSIONS
		SCALE
		1:12
		REV. B
		SHEET 1 OF 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

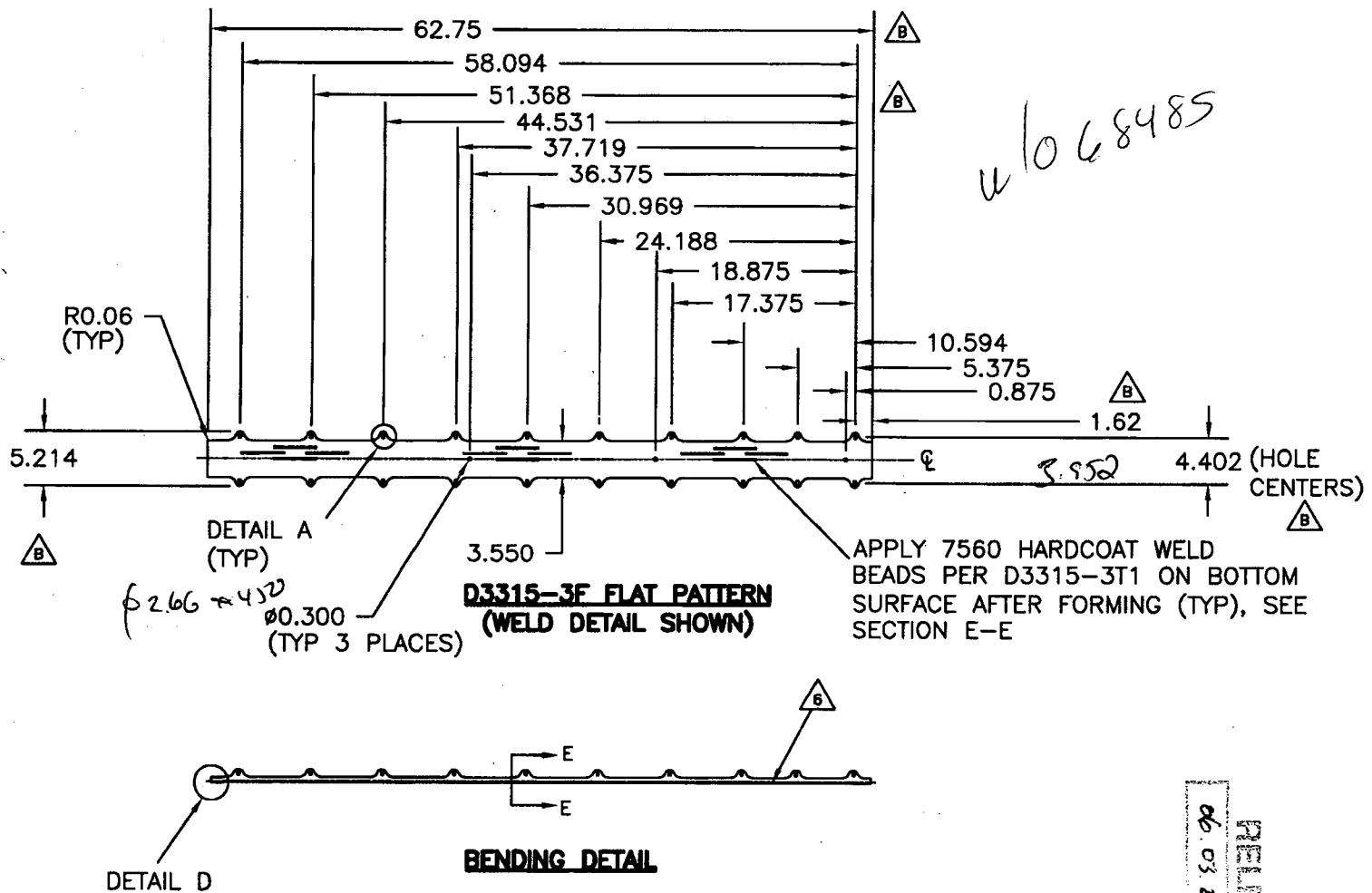
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	06.01.31	DRAWING NO.	D3315	REV. B
		TITLE	WEARPLATE	SCALE 1:16



**D3315-3 WEARPLATE SHOWN (-4 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

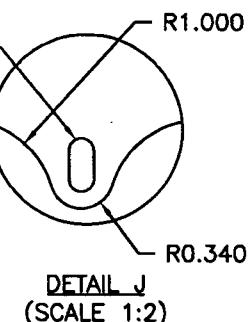
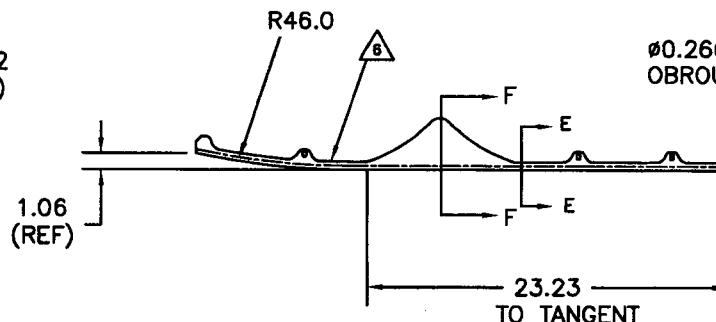
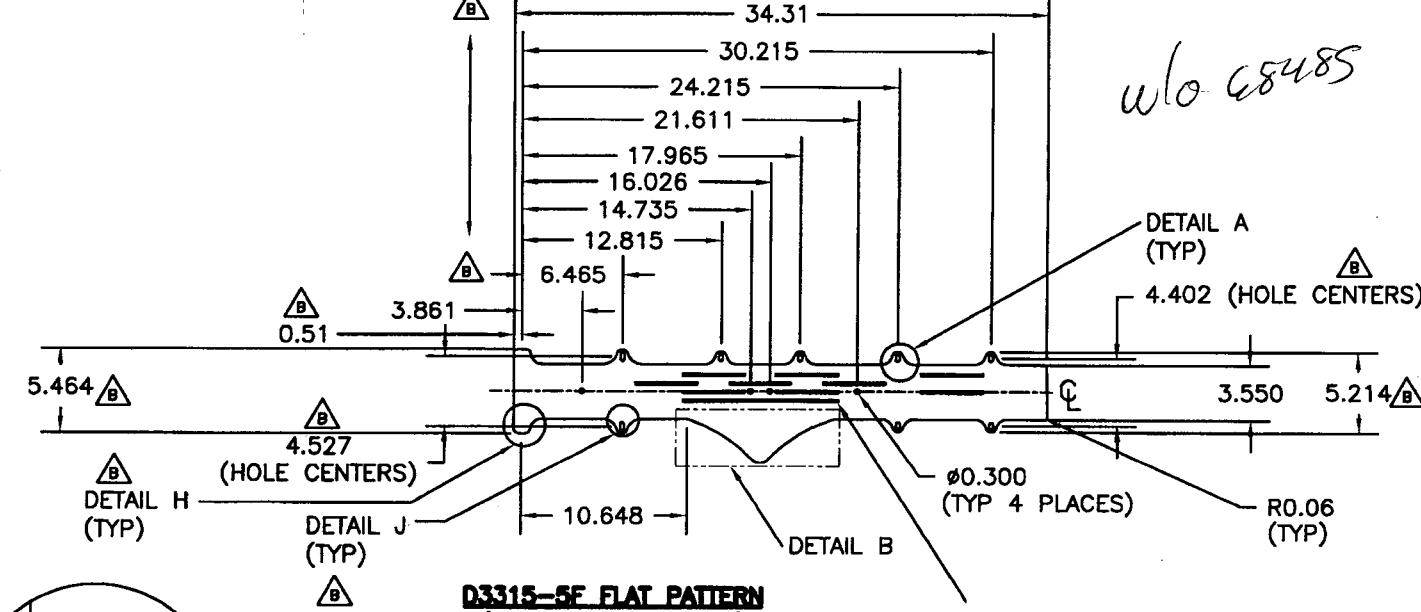
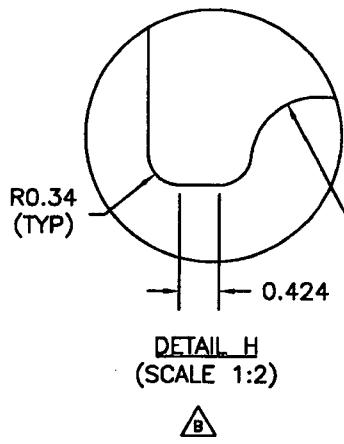
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

06.03.02  
H



BENDING DETAIL

D3315-5 WEARPLATE SHOWN (-6 OPPOSITE)

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSION ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <input checked="" type="checkbox"/>	APPROVED <input checked="" type="checkbox"/>	DRAWING NO. D3315
DATE 06.01.31		TITLE WEARPLATE
		REV. B SHEET 3 OF 4 SCALE 1:12

**DART**

w/o 68485

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

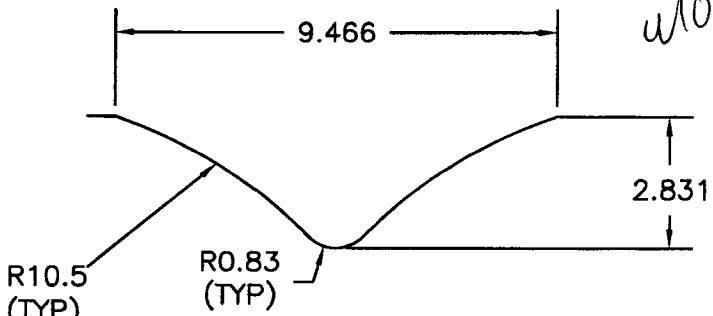
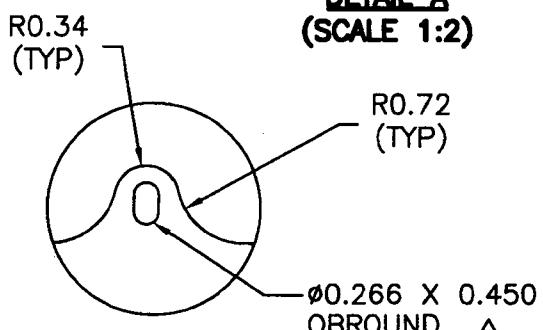
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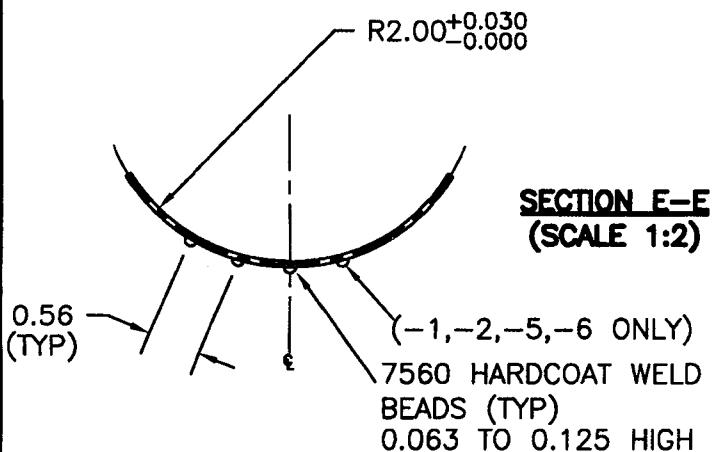
**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD
PH	PH	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
DATE	06.01.31	REV. B
		TITLE
		WEARPLATE
		SCALE
		NTS

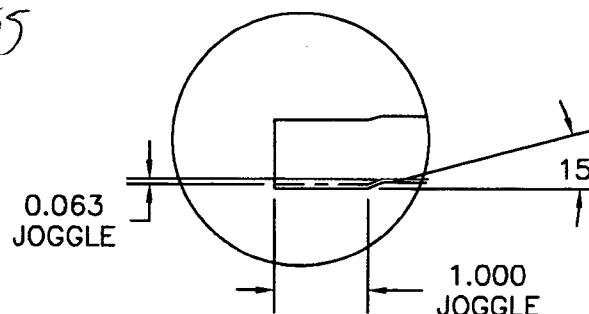
**DETAIL A**  
(SCALE 1:2)



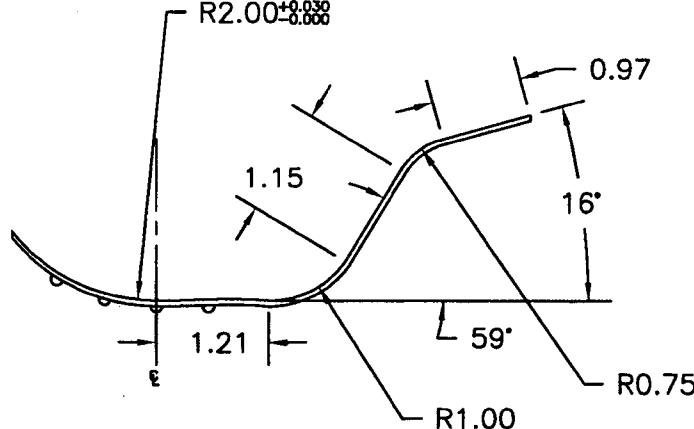
**DETAIL B**  
(SCALE 1:4)



**SECTION E-E**  
(SCALE 1:2)



**DETAIL D**  
(SCALE 1:2)



**SECTION F-F**  
(SCALE 1:2)

W/O:		WORK ORDER CHANGES					
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